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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/060,081	01/31/2002	Rafael Jose Castillo	317-46US	3028

7590

09/21/2004

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EXAMINER

DAVIS, ROBERT B

ART UNIT

PAPER NUMBER

1722

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/060,081

Applicant(s)

CASTILLO, RAFAEL JOSE

Examiner

Robert B. Davis

Art Unit

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 14-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-11, 14-18 and 20 is/are allowed.
- 6) ☒ Claim(s) 19 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Response to Amendment

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 19 and 21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant has amended the following phrase in claims 19 and 21 as follows: "channel/groove-junction-A is randomly staggered, circumferentially, with respect to channel/groove-junction-B, in that orientation-angle-A is different from orientation-angle-B". Applicant argues the structure of Halter (DE4218095) wherein the grooves on the opposite side of the plate are located in the lands region of the other side of the plate. The term "randomly" does not have support in the specification and is a negative limitation which tries to get around the Halter reference. While the structure shown in figure 12 of the present specification is clearly different from the structure of Halter, applicant has coined the term "randomly" at the time of the amendment without showing support for this in the specification. It is the suggestion of the examiner that applicant amend claims 19 and 21 to claim the exact structure shown in figure 12 to overcome this rejection and delete "randomly" from these

claims. If applicant wishes to use the term "randomly" a CIP application is suggested to pursue this language.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rodriguez et al (6,343,919: entire disclosure) taken together with Halter (German reference DE 4218095 A1: figures 1-4 and the English abstract).

Rodriguez et al disclose an extrusion die apparatus for manufacturing blown film comprising: a die member (40) of a generally annular form, having a circumferential outer face (18) and a circumferential inner face (14), the die member has opposing groove faces (20, 22) in the respective disks (figure 5), each of the opposing groove faces has melt conveying channels (24, 30), the die member has a melt entry port (32) which is either one feed port for both sides or separated for opposing sides of the die member as shown by dotted line (34 in figure 5) into separate feed ports (32a, 32b), the melt conveying channels include spiral channels (30) which feed the die annulus (16), the melt spills over lands between grooves (column 4, lines 22-25), the spiral grooves progressively feed the melt to the inner edge and annulus (16, see figures 1-4), the melt channels also include N supply channels (24) and N recombining mixers (31) which mix melt from two adjacent supply channels (see figures 1-4 and column 3, lines 37-42).

The specification and claims of this application have been rewritten, but the structure of the Patent clearly shows the structure of the claims in this rejection. There is additional subject matter that has not been described in the patent.

It is noted that this application does not have a common inventor or assignee at this time as Mr. Castillo was deleted from the patent.

Rodriguez et al disclose all claimed elements except for the die feed inlets and the spiral channels being offset.

Halter discloses a die for forming a blown film comprising: a disk element (13) having spiral feed grooves (10) on opposing sides of the disk wherein the spiral channels are offset with respect to each other (abstract). The reference also discloses offset feed inlets (7) in figure 4 for the opposing spiral channels. The reference states that the design is simpler and improves melt homogeneity.

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the apparatus of Rodriguez et al by having offset spiral channels and offset feed inlets as disclosed by Halter for the purpose of improving melt homogeneity of the extruded product. It is noted that applicant has amended claims 19 and 21 to include the term "randomly"; however, such has no support in the original specification. Since Halter discloses offset spiral channels and such would eventually be chosen as the "random" orientation by one of ordinary skill in the art using a completely random offset orientation, such as one selected using a random number generation algorithm, the combination including Halter is still applicable.

Allowable Subject Matter

5. Claims 1-11, 14-18 and 20 are allowed over the prior art of record for the reasons of record.

Response to Arguments

6. Applicant's arguments filed 08 July 2004 have been fully considered but they are not persuasive. The introduction of the term randomly to claims 19 and 21 has been fully discussed in the new matter rejection and the art rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert B. Davis whose telephone number is 571-272-1129. The examiner can normally be reached on Monday-Friday 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benjamin L. Utech can be reached on 571-272-1137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Robert B. Davis
Primary Examiner
Art Unit 1722

9/18/04